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| **Microeconomics Chapter 1: The Economic Problem** | |
|  | **Learning Objectives:** | |
|  | *By the end of this unit, you should be able to:*   1. Define key economic terms. 2. Identify and understand that scarcity, choice, and opportunity cost are at the heart of economics. 3. Explain the three fundamental economic questions that all societies must address. 4. Compare how different types of economies answer these key economic questions. 5. Describe and use the production possibilities model to illustrate opportunity costs, efficiency, unemployment and the effects of technological innovations. |  |
|  | **Learning Materials:** | |
|  | * Read: Chapter 1 - Principles of Microeconomics. | |
|  | **Overview of this Unit** | |
|  | A study of economics is essentially a study of choice. We make choices in order to maximize our individual and/or collective benefit.  In this unit, we will expand on this basic concept. First, we will discuss **scarcity.** Scarce resources mean that we are forced to make choices and select one thing or state over another.Scarcity, in fact, is often said to be the starting point of economics.  The forced choice brought about by scarce resources, means that we have to give up or forego other available options when we choose one option over another.   The fact that we miss out on these other options could be considered as a “cost” – specifically in economics this is called the **opportunity costs**.  Finally, we will explore the basic resources that are available to us in our economy. These are the basic contents of the economic recipe whose proportions we vary to make our desired outcomes. How we select these proportions makes up a good bit of the discussion in the remainder of this unit. | |

.  The Economic Problem -    Scarcity, Choice and Opportunity Cost

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| **Unit 1 - Topic 1:  Scarcity, Choice and Opportunity Cost** |
| |  | | --- | | **You can’t always get what you want.**  ***~ Mick Jagger and the Rolling Stones*** |   Take a minute to look in your pocket, wallet and/or purse.  Count how much money you have.  What could you buy with this amount of money?  Whether you found a little or a lot of money, there are limits to what you can buy – even if you have a credit card!  You will likely be forced to decide to buy one or two things, and this will mean that you won’t be able to buy something else. If you think about it, you make such a decision every time you buy something. This illustrates the concept of ***scarcity***.  Scarcity simply means that despite our unlimited wants we can only afford so much. Therefore, we need to make choices between options A, B, C and so on. These choices are often difficult to make especially when you have similarly appealing options.  Further to this concept, is the idea of ***opportunity cost***.  Opportunity cost is simply what you missed as a result of making a choice. If you chose to stay in and study when your friends decided to go out and party, your opportunity cost is the fun you missed at the party. You will, however, benefit from the study time you had and that's the benefit you received. Opportunity cost is an important concept in economics and one that must be considered in all economic decision making. |

EC1100 Microeconomics - PT (CL) - Unit 1.  The Economic Problem -    Fundamental Economic Questions

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| **Unit 1 - Topic 2:  Fundamental Economic Questions** |
| ***What should we make?  How should we make it?  Who should we sell it to?***  Now that we have an understanding that choices need to be made in an economy and that each choice means that we forego other opportunities, we must expand the scope of our discussion to determine the basic nature of the choices we make. First, let’s go back to our example of the money in your pocket, wallet or purse.  Let’s say you are deciding what to do with it. You must think about:   * what you want to buy, * how you are going to get it, and * who you will buy it for.   A company like Exxon Mobile has to answer similar questions when it decides where to invest its money:   * What should we buy/make/produce? (Oil from offshore? / Oil Sands? / Land wells?) * How should we go about making/producing it? (Floating Production Platforms / Gravity Based Platforms) * And who will we sell it to? (Come-by-Chance Oil Refinery in NL?, or a refinery in Philadelphia?)   The same basic questions need to be asked by government. Newfoundland and Labrador Premier Danny Williams needs to decide how to spend the province’s limited funds by asking:   * What should we spend our money on (Health, Education etc.?) * How should we allocate it? (more to Health less to Education) and * Who should benefit most? (sick people or students)   When asking and answering these questions it is important to consider what option(s) will provide the maximum possible benefit. All economic theory is based on the concept that we will always attempt to maximize our benefit no matter what option we choose. In summary then, there are ***three*** basic economic questions that individuals, business and government need to ask before deciding amongst a series of options:   |  |  | | --- | --- | |  | **What to Buy/Produce?** | |  | **How to Buy/Produce it?** | |  | **For Whom to Buy/Produce it?** | |

EC1100 Microeconomics - PT (CL) - Unit 1.  The Economic Problem -    Economic Systems

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| **Unit 1 - Topic 3:  Economic Systems** |
| From a national perspective, different national governments around the world answer the three fundamental questions, “What to Produce?”; “How to Produce?” and “For Whom do we produce it?” differently.  Communist governments such as those that exist in Cuba and China tend to be very much involved in answering these basic economic questions. Western countries such as Canada and the United States tend to allow the market to answer these questions. The market is simply the hordes of buyers and sellers that exist out there exercising their own free will to buy and sell what they want. In a market economy, if demand for an item goes up, producers will be encouraged to produce more or increase prices. The opposite is true as demand falls.   |  | | --- | | **Modern Economies Answer the Basic Economic Questions Differently:** | | |  |  | | --- | --- | | **Communist Countries (Cuba, China)** | **Western Countries (Canada, United States)** | | Command Type Economies | Competition Type Market Economies | | Basic economic questions answered by government. | Basic economic questions answered by the market. | | ***Source:*** *McGraw-Hill Ryerson. 2004.* | | | |

EC1100 Microeconomics - PT (CL) - Unit 1.  The Economic Problem -    Factors of Production

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| **Unit 1 - Topic 4:  Factors of Production** |
| **Land, Labour, Capital and Enterprise**  In order for an economy to produce products and services, it requires economic resources. These resources are known as the ***Factors of Production*** and are classified as being:   * Land, * Labour, * Capital and * Enterprise.   Land is considered to be any natural resource that can be used to produce goods and services.  Land would include such things as oil fields, ore deposits, fish in the ocean etc. The important criterion is that it is *naturally occurring*. Golf courses, for example, are **not** considered land because, although they are on land, they are not naturally occurring.  Labour is the second factor of production. Labour is defined as human physical and mental effort that can be used to produce goods and services. A firm’s employees are typical examples of Labour.  The third factor, Capital, is a key factor of production. Capital consists of all human-made resources that can be used to produce goods and services. The golf course mentioned above is man-made and would be considered capital. Other examples of capital would be money, factory equipment, airplanes, fish plants and offshore platforms.  The final factor of production is Enterprise or Entrepreneurship. Enterprise is the human resource that innovates and takes risk. It is important to try to distinguish between labour and enterprise. ***Enterprise*** is focused ***on ideas and mental effort*** whereas ***labour*** tends to focus more on ***physical human effort***.  Please note that sometimes the difference between these two factors of production is indistinguishable. ***Microsoft’s Bill Gates or Canadian Helicopter’s Craig Dobbin*** would be excellent examples of the Enterprise/Entrepreneurship factor of production.  Firms are not free to use any of the factors of production. For their use, there is an incurred cost known as ***Factor Payments***.  For Land, there is rent or royalties that need to be paid to its owners. For Labour, firms need to pay wages or salaries in return for the effort of these employees.  For Capital, firms incur interest costs on the borrowed funds needed to purchase and use the capital.  Finally, for Enterprise, firms that find a better, more innovative way to do things are rewarded with profits.   |  | | --- | | **Incomes of Factors of Production** | | |  |  |  | | --- | --- | --- | | **Factor** |  | **Factor Payment** | | Land |  | Rent | | Labour |  | Wages | | Capital |  | Interest | | Enterprise |  | Profits | | ***Source:*** *McGraw-Hill Ryerson, 2004* | | | | |

EC1100 Microeconomics - PT (CL) - Unit 1.  The Economic Problem -    Circular Flow

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EC1100 Microeconomics - PT (CL) - Unit 1.  The Economic Problem -    Production Possibilities

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| **Unit 1 - Topic 5: Production Possibilities & the Power of Technology** |
| Scarcity means that we cannot have it all. We have limits and, as a result, there are choices that we need to make in order to maximize our benefits. While the ***Circular Flow Model*** helps explain how our economy works, the ***Production Possibilities model*** helps demonstrate and explain how our economy is constrained by limited resources.  In order to demonstrate this model, we need to make some basic assumptions:   * The economy can only produce combinations of two products * The economy is working at full employment * The economy uses the best possible technology * The economy can produce efficiently * Seeing that we are at maximum production, if we produce more of one product we will need to produce less of the other.   The table below shows our economy producing combinations of fish or oil. Choices A - F represent combinations of fish production and oil production. Choice A, for example, has the total economy’s production (100%) focused on fish. This yields an output of 30 thousand tonnes of fish per day. Choice B has 80% of the economy’s production on fish and 20% focused on oil. This combination yields an output of 28 tonnes of fish and 8 barrels of oil. You should now be able to read the other combinations from the table below:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **The Production Possibilities Table** | | | | | |  | **Fish** | | **Oil** | | | **Choices:** | Percent of Residential Use | Output | Percent of Residential Use | Output | | ('000 Tonnes per Day) | ('000 Barrels per Day) | | A | 100 | 30 | 0 | 0 | | B | 80 | 28 | 20 | 8 | | C | 60 | 24 | 40 | 13 | | D | 40 | 18 | 60 | 17 | | E | 20 | 10 | 80 | 19 | | F | 0 | 0 | 100 | 20 | | ***Source:*** *McGraw-Hill Ryerson, 2004* | | | | |   By linking up the choice points A - E, you can create the curve.  Once you draw the curve, consider a combination that falls between the origin of the graph and the curve. You will note that such combinations are all attainable. The economy can produce these combinations although it may not be at maximum productivity as a result.  Now consider a combination that falls outside the curve. You will note that such combinations are not possible. The economy cannot produce these combinations because of limited resources.  The points along the Production Possibilities curve represent the optimum possible combinations of output in the economy.   |  | | --- | |  | |  |     **Opportunity Costs and the Production Possibility Curve**  You will note from the production possibilities table that, as you move from one possible level to the next, production of one item goes up at the expense of the other. Going from level B to C, for example, causes output of oil to increase by 5 to 13 barrels per day. However, this is done at the expense of fish production, which falls from 28 to 24 tonnes per day. This drop in fish production of four tonnes per day is the Opportunity cost of increased oil production.  **Technology’s Impact on the Production Possibilities Curve**  Once you understand how the Production Possibility’s curve works you may ask “How can we continue to grow the economy if we have to give something up in order to get more of another thing?”  Well we can improve our overall lot by doing more with less. If, for example, you could produce 30% more oil for a given amount of effort (remember we have limited resources) then we could potentially push the Production Possibility’s curve out from the origin and produce more oil without sacrificing fish production. Improvements in technology do allow us to produce more with less.   |  | | --- | |  | |  |   The Production Possibilities curve is a simple but key economic model to understand because it clearly demonstrates the concepts of scarcity, choice, opportunity cost and the impact of technology on our economy. |

Microeconomics - PT (CL) - Unit 1.  The Economic Problem -    Summary

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| **Unit 1 - Summary** |
| In this unit, we introduced key economic concepts such as scarcity, choice, and opportunity cost.  These concepts are foundation concepts in economics and you need to be familiar with them before proceeding further.  We also discussed the three fundamental economic questions asked by all societies – what to produce?; how to produce and for whom?.  No matter if government strictly controls a country’s economy or the free market is the economic decision maker, these questions are always addressed in an economy.  We also discussed the circular flow concept in this unit. It illustrates how consumers spend money for goods and services provided by business, and how business, in-turn, hires employees and/or attracts investors who, in turn, compensate them for their efforts which, in turn, is used to buy goods and services.  Finally, we introduced and used the production possibilities model to illustrate opportunity costs, efficiency, unemployment and the effects of technological innovations. |
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EC1100 Microeconomics - PT (CL) - Unit 1.  The Economic Problem -    Suggested Problems

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| **Unit 1 - Suggested Problems with Answers** |
| In order to reinforce what you have learned in this unit, I suggest you review the following end-of chapter problems. The following problems are located in the text.   * **#36A – Key Problem** * **#37A** * **#40A** * **#44A** * **#45A**   Once you have attempted this, review the [Chapter 1 Answer Key](http://highered.mcgraw-hill.com/sites/0070946418/student_view0/answer_key.html). |

EC1100 Microeconomics - PT (CL) - Unit 1.  The Economic Problem -    Additional Material

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| **Unit 1 - Additional Material** |
| Select a link below to view additional course materials:   * [Web Links](http://highered.mcgraw-hill.com/sites/0070946418/student_view0/chapter1/web_links.html) * [Multiple Choice Quiz](http://highered.mcgraw-hill.com/sites/0070946418/student_view0/chapter1/multiple_choice_quiz.html) * [Internet Application Quiz](http://highered.mcgraw-hill.com/sites/0070946418/student_view0/chapter1/internet_application_questions.html) * [Sample Exam Questions](http://highered.mcgraw-hill.com/sites/0070946418/student_view0/chapter1/sample_exam_questions.html) * [Glossary](http://highered.mcgraw-hill.com/sites/0070946418/student_view0/chapter1/glossary.html) * [Student Answer Key](http://highered.mcgraw-hill.com/sites/0070946418/student_view0/chapter1/answer_key.html) |

EC1100 Microeconomics - PT (CL) - Unit 1.  The Economic Problem -    Presentation (